RESTRICTED
DIFFUSION
RESTREINTE

TOWARD INTEGRATED MEDICAL RESOURCE POLICIES FOR CANADA

Morris L. Barer

Greg L. Stoddart

Report prepared for the Federal/Provincial/Territorial
Conference of Deputy Ministers of Health

June 1991

(MANITOBA HEALTH HOLDS THE COPYRIGHT TO THIS REPORT ON BEHALF OF THE CONFERENCE OF DEPUTY MINISTERS OF HEALTH)

THE UNIVERSITY OF BRITISH COLUMBIA

91-06165/

Centre for Health Services
and Policy Research
429 - 2194 Health Sciences Mall
Vancouver, B.C. Canada V6T 1Z6
Tel: (604) 228-4810
Fax: (604) 228-2495

June 20, 1991

Mr. Frank Maynard
Deputy Minister
Manitoba Health
Room 308, Legislative Building
450 Broadway Avenue
Winnipeg, Manitoba
R3C 0V8

Dear Mr. Maynard:

It is our pleasure to submit our final report, "Toward Integrated Medical Resource Policies for Canada", to the Steering Committee of the Conference of Deputy Ministers of Health.

This report represents a concise summary of our findings and the policy options and recommendations that we feel will be central to any effective initiatives in this area. It is supported by two much lengthier background documents, which we also respectfully submit to the Steering Committee.

The first of the background documents provides (a) a much more detailed description of the project, (b) the development of our analytic framework and key themes, (c) a comprehensive reporting of the results from our extensive interviewing, and (d) our own analyses of the fundamental problems in the sector, and of possible avenues for addressing them. The second background document contains a number of appendices prepared by project staff and consultants.

We were particularly struck during the course of our analysis by the extent to which policy success in virtually any area of medical resource management is so critically dependent on concurrent developments or commitments in a number of other areas affecting the provision of medical care to Canadians. We hope that this inter-connected nature of policy avenues, and the need for collaborative regional and national strategies in many key areas, is appropriately conveyed in this summary report.

We wish to thank the Steering Committee for giving us the opportunity to undertake this project. We have had the pleasure of speaking and working with many individuals committed to seeing necessary changes in medical resource policy put in place. They made the process an unusually enriching and rewarding educational experience.

Finally, we wish to thank you and your staff for your assistance and support. We hope that the Conference of Deputy Ministers finds the report and supporting documents of use in its development of policy in the area of medical resource management. In that respect, we remain prepared to assist in whatever ways may seem reasonable and useful to you and your colleagues.

Yours sincerely,

Morris L. Barer

Greg L. Stoddart

Encl.

RESTRICTED
DIFFUSION
RESTREINTE

TOWARD INTEGRATED MEDICAL RESOURCE POLICIES FOR CANADA

Morris L. Barer

Director, Centre for Health Services and Policy Research, and Associate Professor, Department of Health Care and Epidemiology, University of British Columbia; Associate, Population Health Program, Canadian Institute for Advanced Research

Greg L. Stoddart

Professor, Centre for Health Economics and Policy Analysis, and Department of Clinical Epidemiology and Biostatistics, McMaster University; Fellow, Population Health Program, Canadian Institute for Advanced Research

Report prepared for the Federal/Provincial/Territorial Conference of Deputy Ministers of Health. Submitted June 1991.

ACKNOWLEDGEMENTS

Our greatest debt is to the many individuals and organizations, listed in the Appendix, who gave freely, not only of their time, but of their candid views, concerns and hopes. Their insights provided a depth of information and understanding well beyond what one could ever hope to cull from published literature, commissioned reports, or research based on secondary data sets. We are particularly indebted to Eva Ryten, Michel Bérard, Stuart MacLeod, Roberta Labelle and William Tholl.

The project team included: Neil Stuart who assisted us with interviewing; Marc-André Fournier and André-Pierre Contandriopoulos, who provided us with a more detailed and enlightened picture of the Québec policy scene than we could possibly have developed ourselves within the tight project time frame; Jonathan Lomas who provided thoughtful policy advice, a critical eye, and assistance with the drafting of selected sections of the report; Kathy Friesen, who was the project manager, assisted with a significant proportion of the interviews, prepared one of the appendices, and helped us organize and wade through the voluminous literature in this contentious area; Charlene Crumback at UBC, who bore the brunt of the 'manuscript production' and logistical responsibility for the project; Nancy Bishop, Diane Rogers and Lynda Marsh at McMaster, who provided a variety of types of assistance during the project; Christel Woodward, who served as a consultant and critical reviewer on selected aspects of the project; and our seven international consultant teams who prepared the reports that are available in a background document to this report. An undertaking of this magnitude could not possibly have been completed in such a short time without the energetic assistance of these individuals. We suspect, nevertheless, that none of them would wish any part of the report to be attributed to them; convention suggests we should accommodate those wishes -- the analyses, opinions, recommendations, and errors of commission or omission are, in the end, ours.

TABLE OF CONTENTS

Acknowledgements	i
Table of Contents	ii
Preface	iii
Section 1: Executive Summary	1
Section 2: Promoting Change: Summary of General Themes	4
Section 3: Problems in Physician Resource Management	
A. From the Perspectives of Those Interviewed	7
B. From Our Perspective, All Things Considered	9
Section 4: Policy Analysis, Options and Recommendations	
A. Policy Framework	14
B. Summary of Recommendations and Options	17
Appendix : List of Individuals and Organizations Interviewed or Consulted	27

PREFACE

Physician resource policy in Canada is plagued by historical and political inertia, professional and geographic territoriality, incomplete and inconsistent information, frustration, and a great deal of nervous apprehension. It is also a field of remarkable complexity, encompassing issues of equity, distribution, supply, incomes, regulation, immigration, education and research, to name a few of the prominent ones. It would be pretentious of us to suggest that, in the short space of ten months, we developed a complete understanding of every nuance of every issue, and became sufficiently well informed and insightful that we can now do what others before us have avoided, or failed to do: provide a blueprint for a national physician resource policy that will 'work'. So we will not, because we did not.

What struck us during the life of this project was not just the complexity of each issue area taken separately, but the fact that so many issues were so very interdependent. It is this 'inter-complexity'-- the fact that, to have any chance of meeting their objectives, initiatives in one area must be accompanied by concurrent policies in another -- and the diversity of regional and provincial problems, which present the greatest challenges to a 'national approach' to policy co-ordination in this critically important area of health policy. It also points to the need to think of physician resource policy in a dynamic health and social policy context. We need to be able to do much better in monitoring and evaluating the effects of what we do on people's health and well-being, and then in adjusting or fine-tuning policies as may seem appropriate. Perhaps most importantly, we need to get over our collective Canadian-style fear of changing directions even when such re-direction is clearly called for. We must realize collectively that letting policy develop by default, disinterest, or insufficient will, is itself a policy strategy, but one that can only be expected to bring about satisfactory results by those who believe in winning lotteries.

This is not to suggest that the task is impossible (although others may make that judgement after reading this report and its background papers), or that there is no hope for a national strategy. On the contrary, we feel both that there are some areas in dire need of co-ordinated policy development, and that for some of these the most logical (indeed the only logical) approach must be a 'national' approach. But we cannot over-emphasize the fact that ten months of review and analysis, drawing on limited resources, cannot possibly do justice to the complexity of the task.

This complexity is, in part, due to the shifting policy environment. Several significant events occurred during the period of this report, some but not all of which we were able to incorporate into our analysis (which was completed in late January 1991). For example, we have not been able to address in any detail the most recent proposed reforms in Québec. The special report from our Québec associates was completed in late November 1990, just prior to the public release of the proposals.

Nevertheless, we hope we have been able to identify some priority areas for policy attention, to develop some new 'avenues of opportunity' for them, and to offer some initial directions for getting to those 'avenues'. We have tried also to identify both broad directions where stakeholders can be given the opportunity at the next stage to develop consensus on particular initiatives, and specific areas where more intensive and extensive investigation could pay dividends. We do not claim to have done more.

MLB
GLS

May 1991

Section 1 Executive Summary

This report is based on the synthesis of six components: 1) as a starting point, a set of problems as perceived by the Deputy Ministers of Health in Canada; 2) over 70 interviews with individuals involved in a variety of ways with the physician resource sector; 3) eight commissioned reports, one on the experience in Québec and seven international reports; 4) reviews of the academic and 'trade' literature and of recent committee, task force and commission reports in Canada; 5) consideration of physician resource policy initiatives and, where possible, their outcomes in Canada; and 6) our own analytic perspective.

The project had three main objectives: 1) to bring as much as possible together in one place on matters of relevance to physician resource policy in Canada; 2) to develop principles and a framework to guide future policy development; and 3) to make policy recommendations consistent with the principles and framework.

Eleven themes underlie the report; four are of overriding importance. The first is that there is presently no agreed-upon policy objective for management of the physician resource sector in Canada. We propose that this objective should be to meet those health needs of the population that can be most efficiently met by individuals with training as MDs, subject to societal decisions about the resources it is willing to commit to meeting those needs.

The second theme is that an 'optimal' number of physicians cannot be defined by purely technical means. Ultimately, this is a social rather than a technical judgement. Unwillingness to accept this fact has unnecessarily delayed policy development while the parties involved awaited improvements in data collection or planning methodologies.

The third theme is that a national strategy which encompasses specific policies to which all provinces and territories must commit is not feasible; however, nationally co-ordinated provincial/territorial policies built upon a commonly understood policy objective and framework may well be feasible. Even this approach will have to accommodate the reality that all stakeholders do not and will not agree on all issues, and that the nature and severity of problems in this sector do and will vary considerably by region of the country. There is, however, an important consensus among stakeholders that falling back on the status quo as a policy is not acceptable for most problem areas. Furthermore, many of those interviewed during this project felt that 'the time is right' for significant reforms to address the problems in physician resource management in Canada.

The fourth theme reflects the tension that has evolved since the inception of publicly funded health care between the private interests of physicians and the collective goals and objectives of the public enterprise in which they now work. Although this tension has gradually led physicians toward a greater appreciation for the collective public goals, it has been a slow evolution. The theme is, therefore, that more attention must be paid to incentives and structures that, while minimising coercion and regulation,

increase the responsiveness of physicians and organisations such as academic medical centres to the collective goals and needs of the public enterprise of which they are an integral part.

The conceptual framework adopted for the analysis of physician resource policies is the medical career life-cycle. This framework recognises that the distribution and morale of, and the services provided by, the 'physician resource' are the result of the aggregation of many micro-level decisions made by individuals faced with personal and professional incentives at numerous 'choice-points' in their career. Many macro-level policy decisions have tended to ignore this reality and have consequently fallen short of their objectives. Analysis of present incentives faced by individuals when they come to choose (say) specialist versus generalist or urban versus rural practice provides a better insight into the roots of current problems. Therefore, future policy initiatives should explicitly target the incentives faced by individuals at these key 'choice-points' to encourage a distribution and use of physician resources that is more in line with public needs and collective objectives.

Several problem areas, and their causes, were identified in our analysis, including:

- increases in physician supply in excess of population growth without any compelling justification;
- numbers and mix of residency training positions, and mix of specialists, that are out of balance with population need;
- a poorly defined role for academic medical centres and chaotic funding of their activities;
- significant geographic variation in physician supply which affects timely and/or convenient access to necessary services;
- a non-trivial amount of medical services utilization that is being found to be ineffective, inappropriate, or inefficient;
- lack of uniform national standards of clinical competence for licensure;
- inadequate attention in the self-regulation of practice to overlapping 'scopes of capability' and the need for continuing competence review;
- significant dissatisfaction with processes for negotiating remuneration forms and levels;
- conflict between the fee-for-service method of payment and clinical, educational and public policy objectives;
- deficiencies in both the amount and quality of basic clinical and management information, and incomplete use of information which does exist.

(A more detailed and explicit summary of problems and causes appears in Section 3, part B below.)

On the basis of stakeholder interviews it appears that the problem areas around which there is the most consensus only partly coincide with the above. These problem areas are: geographic maldistribution, control over graduates of foreign medical schools, rationalisation of residency

training, the role and funding of academic medical centres, and the role of fee-for-service remuneration. (A complete summary of the problems as perceived by interviewees appears in Section 3, part A below.)

Our policy analysis and development resulted in over fifty recommendations (or options) to address the problem areas systematically. The recommendations are organised around the choice-points in the medical career life-cycle, from high school education exposures, through the MD admissions process and training experience, the pre-licensure period, specialty certification, and on to clinical practice. These recommendations can also be categorized into six general avenues available for physician resource policy: capacity and mix; information; funding and reimbursement; examination, licensure, certification and regulation; curricula; and spatial location (see Figure 1 below). We emphasise the need to link a number of these recommendations in carefully timed and co-ordinated 'policy packages' and warn against the introduction of isolated policies which do not take account of their inter-dependence. (For instance, dealing with graduates of foreign medical schools (GOFMS) requires both policies to control their flow and policies to attract Canadians into the positions where only GOFMS have historically responded to the need.) By necessity, the Summary of Recommendations and Options which appears in section 4, part B below identifies distinct policies. In nearly all cases, however, each policy is a component of a co-ordinated package designed to address specific problems. The detailed nature of many of these linkages is set out in the background papers.

Several steps remain in the process of drafting a national 'strategy' (however defined) for the management of physician resources in Canada. These include more explicit consideration of the timing and co-ordination of specific policy initiatives and discussion of which parties might accept leadership roles in policy change. This process should begin, however, with an opportunity for stakeholders, including governments, across Canada to react to the framework, analysis and recommendations of this report, to identify the principles on which collaboration can be based, and to indicate the 'policy packages' for which there exists the strongest initial support.

The level of concern about the current state of this sector demonstrated by the many individuals and groups whom we interviewed, and their willingness to assist us in preparing this report, may augur well for the outcomes of a consensus-building exercise. It is imperative that this effort be made, because effective medical care for Canadians in the future depends upon both sensible and sensitive management of physician resources today.

Section 2 Promoting Change: Summary of General Themes

The following important themes repeatedly emerged during the conduct of this project and underpin the specific recommendations and policy options which appear in Section 4:

1. The main objective of physician resource policy should be to meet those health needs of the population that can be most efficiently met by individuals with training as MDs, subject to societal decisions about the resources it is willing to commit to meeting those needs.

   The various jurisdictions and stakeholders involved currently appear to have no agreed-upon policy objective, such as the above, available for the physician resource sector. Establishing a consensus around the policy objective for the sector is an important first step. For the purposes of the report we have adopted the above. Several important corollaries are developed in the background documents.

2. An 'optimal' number of physicians cannot be defined for policy purposes by technical means; this is ultimately a social rather than a technical judgement.

   Unwillingness to accept this fact has led to inappropriate delays in policy development while participants awaited technical improvements in data collection or modelling methodologies.

3. Future policy development must recognise that the individual decisions of prospective and practising physicians, made in the face of strong personal, institutional and largely private and local incentives, are far more important determinants of policy outcomes in the physician resource sector than the macro-level policy decisions characteristic of previous policy development.

   Although the health-care system is publicly funded and is intended to meet general social objectives, physicians maintain the scope to make decisions which may reflect their private interests. If increasing coercion and regulation are to be avoided, solutions to problems in this sector must focus more on restructuring incentives in the medical career life-cycle to more carefully align private with social interests.

4. The complex inter-dependence of specific policy areas in the physician resource sector should not be taken as a reason to fall back on the status quo, but will necessitate extensive co-ordination (across jurisdictions and stakeholders) and careful complementary timing for the implementation of policy 'packages'.

Broad consultation and implementation responsibility is needed to take account of the complexity of policy interactions in the physician resource sector. For example, isolated policies on undergraduate medical school enrolment may do more harm than good if they are not combined with appropriate companion policies concerning graduates of foreign medical schools, financing of academic medical centres, residency training, and quality assurance, to name only a few.

5. A national strategy which encompasses policies to which all provinces must commit is probably not feasible. Nationally co-ordinated provincial/territorial polices built upon a commonly understood policy objective and framework may well be feasible.

   Differences in priorities, philosophies, problems and practices in each of the provinces/territories will require that any national strategy must have enough flexibility to allow for such differences; however, there are some areas for which national strategies are essential, e.g. standards for licensure, and training capacity.

6. Some problems probably have no solution, but may be managed so as to be less problematic. Geographic maldistribution of physicians is a good example of this.

7. Academic medical centres are in urgent need of reform to align their governance, explicit roles, and funding more precisely with their mission within universities, and to pull them back from their evolving role as 'trade schools', increasingly reliant on service funds for operation, and slow to respond to changing social needs.

   Academic medical centres have the potential to take a leadership role in reform of the physician resource sector and are, in any event, central to providing for the health-care needs of the population. Their ability and willingness to take on such a leadership role seems to be impaired, however, by numerous conceptual and structural problems relating to the place of medicine in higher education.

8. Long-term planning relating to numbers and mix of health-care personnel can only occur once the future role of the physician is better articulated.

   In Canada's publicly funded health-care system, physicians operate under a 'social contract' to serve the medical care needs of the population. The recent emergence in the public domain of evidence that not all that is done by physicians is necessarily appropriate or effective has not only raised questions about the extent to which they are fulfilling the contract, but also has left physicians feeling harassed and unappreciated. A more explicit definition of

society's expectations of medicine (with particular emphasis on isolating the substantial proportion of its activities which is of proven worth from that of unproven or dubious worth) would both guide future health personnel policy and potentially increase the general morale of physicians.

9. A primary guiding criterion for physician resource policy should be the concept of 'effectiveness'.

Whether an intervention does more good than harm or than no treatment is agreed upon by all parties as an essential foundation for decision-making. New policies on accountability, funding, training, and management in this sector must take account of this concept.

10. There is a continuing evolution from the view of physicians as private agents for their patients' and their own interests, to the view of physicians as clinically skilled agents serving the collective goals of a publicly funded health-care system.

Physicians, more than any other group in Canadian society, have rights and privileges that allow them to satisfy professional interests within a publicly funded enterprise. This system of 'private participants in a public enterprise' requires the reconciliation of 'professional' and 'political' ideologies concerning both the content and context of medicine. Progress in this direction, which has been slowly evolving since the inception of 'medicare', may be aided by additional incentives that make the accountability of physicians to collective public objectives more explicit.

11. Greater effort should go into providing the Canadian public with information, in easy-to-understand formats, on the effectiveness, efficiency and alternative allocations of existing or proposed resource commitments designed to improve health through medical care.

The information typically provided to the public often does not provide a clear picture of our current knowledge of the effectiveness and efficiency of medical care, and may lead the public to have unrealistic expectations. The issue of providing information to the public is not receiving the degree of attention that it deserves. Informed public decision-making, especially in the context of an apparently increasing trend toward devolution of management authority for health-care services, will require the effective provision of more information.

Section 3 Problems in Physician Resource Management

A. From the Perspectives of Those Interviewed

On the basis of frequency, emphasis and degree of consensus revealed during the interviews conducted as part of this project (see list of those interviewed in the Appendix), three categories of problems were isolated: 1st tier problems, 2nd tier problems, and problems with little agreement on nature or extent. (No significance should be attached to the order of presentation of problems within each category.)

1st Tier Problems

1. Graduates of Foreign Medical Schools

   Dealing with the various flows of GOFMS was seen as an extremely high priority as a national pre-requisite for dealing with many of the other problem areas.

2. Number and Mix of Residency Positions

   The main concern expressed was the need for rationalisation of residency places to achieve a better match with service needs.

3. Role and Funding of Academic Medical Centres

   This was particularly identified as a problem in Ontario and most often related to the disorganised way in which funding sources had evolved.

4. Geographic Maldistribution

   This emerged as a major concern of almost all intervievees. Of particular note were shortages of some specialty services in rural areas. There was less, but still significant, agreement that major urban areas were over-supplied with general practitioners.

5. The Role of Fee-For-Service Remuneration

   Although this issue arose in connection with all forms of service delivery, and was alleged to underly many of the other problems in this sector, it was particularly noted in connection with the funding of academic medical centres.

2nd Tier Problems

1. Medical School Curricula

Concerns were largely that the content did not reflect the changing health-care needs of the population, and that the training sites did not provide the range of exposures that would allow graduates to feel comfortable practising outside urban areas and/or in tertiary-care hospital environments.

2. Proliferation of Sub-Specialties and Residency Programs

The concern was that the expansion of programmes in new sub-specialties was relatively uncontrolled, and that recognition of each new sub-specialty spawned a demand for residency programs out of proportion with population requirements for the specialists. This was often raised in the context of the relative powers of residency programme directors and deans, as well as in the context of the role of the Royal College.

3. Role of Self-Regulation for the Medical Profession

There was some questioning of whether the role and activities of self-regulation had kept pace with the changing environment in which medical care is delivered.

4. Licensure of Physicians

The lack of common inter-provincial pre-licensure standards was the most common concern in this category.

Problems with little agreement on nature or extent

1. Medical School Enrolment and Overall Physician Supply

Other than the comments noted above on shortages of rural specialists and potential surpluses of urban general practitioners, no consensus emerged on overall supply. The weight of opinion suggested that some further reduction in Canadian undergraduate medical school enrolment was overdue.

2. Specialty Shortages

Although some specialties were mentioned more often than others, targets varied by province and viewpoint of interviewee.

3. Research, Planning and Information

Although a variety of deficiencies were mentioned, there was little consensus on which needs should be given priority.

B. From Our Perspective, All Things Considered

We outline in this section our perspective on the problems, including our view of their underlying causes. While this summary provides the 'highlights' of the section, it cannot capture the complexity and interconnectedness of the policy issues which we have attempted to draw out in the background papers.

Overall Physician Supply

PROBLEM : - The long-term trend of annual increases in the rate of growth of physician supply in excess of population growth continues without obvious or compelling justification.

CAUSES : - Undergraduate enrolment is too high relative to population growth because current training capacity is 'rooted' in the 1964 Hall Report, the population projections of which have turned out to be grossly in error.

- There is too little, and fragmented, control exercised over the entry (into Canada, and especially into practice) and/or subsequent status of graduates of foreign medical schools.

Residency Training and Specialty Certification (Numbers and Mix)

PROBLEMS: - The number and mix of post-MD training positions are out of balance with population need and with the educational capacity required for the present medical undergraduate complement.

- The present organization of training programmes is inefficient, with possible implications for the quality of post-MD education.
- The present methods of funding residency positions and the clinical services that residents provide are both inefficient and deleterious in terms of their impact on the educational experience of post-MD trainees and the priorities of the host academic medical centres.
- Present clinical exposures and experience rarely provide levels of confidence and competence sufficient to encourage graduates to practice outside urban centres.

CAUSES : - There are too many residency positions, an increasing proportion of which are not controlled by Ministries of Health.
- There is a poor match of types of positions to types of future health-care needs.
- The growing reliance of academic medical centres on clinical earnings, and the fact that clinical supervisors receive fee-for-service remuneration for services provided under supervision by residents, result in an over-emphasis on service provision by residents.
- Clinical exposures during training are often not the most appropriate for future community practitioners.
- There is poor co-ordination of residency programmes, within medical schools, across medical schools and across provinces.
- Incentives in medical schools favour sub-specialization.
- The concentration of sub-specialists for research purposes in academic medical centres creates a sub-specialty ethos that affects curricula and mix of clinical exposures.
- The concentration of post-MD training in urban tertiary hospital settings constrains opportunities for community clinical exposures.

Specialty Maldistribution

PROBLEM : - There is an inappropriate mix of specialists relative to the need for their services, especially on a geographic basis.

CAUSES : - There is no mechanism to signal population needs to those setting training priorities.
- Sub-specialties have been allowed to proliferate, partly in response to pressures from the U.S.
- Relative incomes once in practice, lifestyle and status considerations, and the nature of current training environments provide incentives for sub-specialisation.

Role and Funding of Academic Medical Centres

PROBLEMS: - The roles of academic medical centres are poorly defined.
- The funding of academic medical centres is unstable, chaotic, and inconsistent with their roles.

CAUSES : - No mechanisms exist for all interested and affected parties to develop and agree upon a modern 'social contract' for the centres.
- Multiple sources of funds are not co-ordinated and are often unrelated to the functions they support.
- 'Opportunistic' sources of funds (clinical earnings and competitive research grant funding) support an increasing

proportion of the basic infra-structure of the centres.
- Control over both the sources and the internal allocation of funds is fragmented.
- An alleged decrease in funding from Ministries responsible for higher education has increased centres' reliance on clinical earnings.
- Incentives associated with fee-for-service remuneration are largely incompatible with the functions and objectives of academic medical centres.

Geographic Maldistribution

PROBLEM : - Significant geographic variation in physician supply means that necessary services are not available to some Canadians in a timely way or without substantial inconvenience, and that some regions have more physicians than are required to meet most of the local population's medical care needs.

CAUSES : - Individual practitioner decisions are driven by professional incentives and personal lifestyle factors which strongly favour concentration in urban practice settings.
- The selection of students by medical schools takes inadequate account of the relative need for rural physicians.
- Exposures and influences during training encourage urban practice.

Patterns of Medical Service Utilization

PROBLEM : - A non-trivial amount of medical service utilization is being found to be ineffective, inappropriate, or inefficient.

CAUSES : - Services and procedures, including many currently in use, are not routinely subjected to rigorous scientific evaluation.
- There is poor awareness of evidence about effectiveness and there are few good mechanisms to implement changes in practice patterns among practising physicians.
- Data on the relative costs and benefits of different services are frequently not available.
- Fee-for-service payment, especially when coupled with increasing physician supply in urban areas, encourages over-servicing.

Licensure and Regulation

PROBLEMS: - There are no uniform national standards of clinical competence for licensure.
- The regulation of medical practice takes little or no account of overlapping fields of training and known areas of substitutability.
- The regulation of physicians embodies no uniform, systematic review of continuing clinical competence.

CAUSES : - Licensure is an area of provincial jurisdiction, with few co-ordinating mechanisms.
- The structure and processes associated with licensing and regulation of the medical profession have not kept pace with the evolution of medical knowledge.
- There are few explicit lines of public accountability for Colleges and licensing authorities.

Physician Remuneration and Global Expenditure Policy

PROBLEMS: - Current processes of fee bargaining and internal fee schedule allocation are not perceived by many physicians to produce fair or equitable outcomes.
- 'Transaction costs' of fee or income negotiations are high.
- The dominant method of remuneration, fee-for-service, embodies no incentives to encourage the efficient use of the physician resource.
- Fee-for-service payment is considered an unassailable 'right' by many physicians.
- Fee-for-service payment encourages the proliferation of services.
- Fee-for-service payment creates structural conflict between physicians and the globally-funded institutions in which many of them work.
- Fee-for-service payment leads to open-ended budgets and resulting problems of predictability for provincial governments.
- Provincial governments generally act as if the public is unwilling to spend more on medical care, despite the fact that little information exists on what an informed public might wish to spend.

CAUSES : - Political power accrues unevenly to different groups within medical associations.
- Many provincial governments fear the uncertainty associated with binding arbitration for dispute resolution.
- Medical associations fear the uncertain consequences of alternative (to fee-for-service) methods of remuneration.
- Fee-for-service payment is process- rather than outcome-based, and favours 'technical' or 'procedural' rather than 'cognitive' approaches to care.
- Fee-for-service payment is considered part of professional autonomy by many physicians.
- There is a long-term impact on trainees from being immersed in fee-for-service payment environments in academic medical centres.
- Lack of the Rand formula (compulsory 'dues'; voluntary membership) inhibits medical associations from engaging more fully as partners in policy development.

- Only very imperfect mechanisms exist for ascertaining public preferences with respect to the expenditure of public funds, and few (if any) effective mechanisms exist for providing the public with the information it would need to make informed decisions of this nature.

Information Creation and Provision

PROBLEM : - There are serious deficiencies in the amount and quality of basic information, such as the health status of the population (both over time and for specific groups, regions and communities). Moreover, key actors in this sector often do not make good use of the information that is available.

CAUSES : - No clear priorities or system-wide approaches for information creation exist, due in part to lack of both interest and inter-provincial co-operation.
- Dissemination of information is haphazard and, because it is often championed by those with specific 'causes', frequently only one 'side' of an issue is presented.
- There are few incentives for the use of available information in every-day decision-making.
- The media, the public, and disease- or issue-based interest groups tend to 'create' and disseminate medical care information in innocence of any broader context of health and well-being.

Section 4 Policy Analysis, Options and Recommendations

A. Policy Framework

One of our objectives for this project was, as one interviewee suggested, to "bring everything together in one place". Two foci of the project have been the specific influences on the supply of physicians in Canada available for clinical practice and the possible policy avenues for promoting changes in the physician resources sector throughout the medical career life-cycle. In Figure 1 we summarize this information, as developed during the course of the project, in chart form.

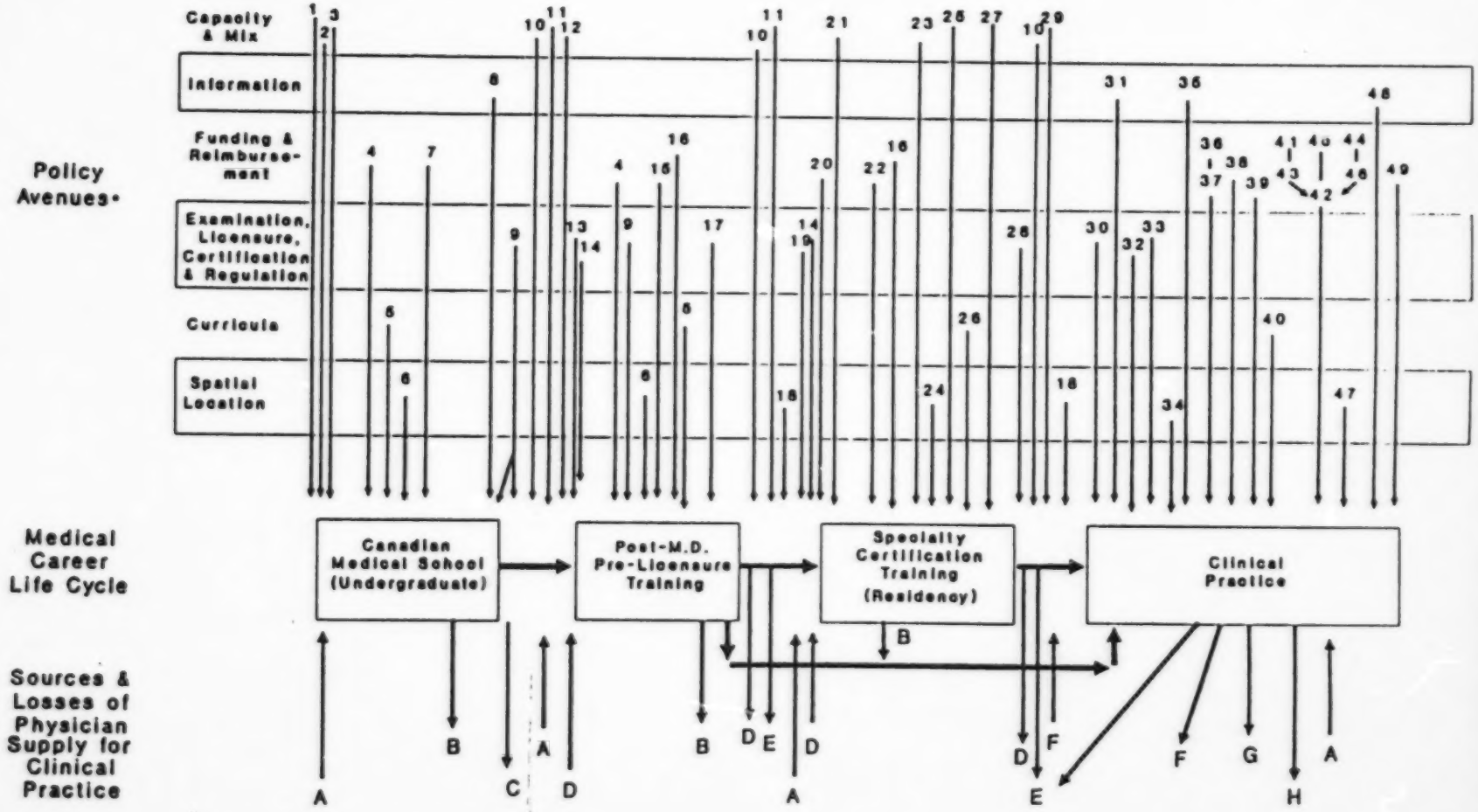
The sources and losses of physician supply are shown below the medical career life-cycle progression. Specific sources and losses are identified by capital letters, explained in the accompanying legend. The sources are Canadian citizens and permanent residents, visa trainees, and visa physicians. The losses are withdrawals from undergraduate or post-graduate training, MCCQE failures, non-clinical practice careers, retirements, and emigrants. The approximate points of inflow and outflow are indicated by the position and direction of the arrows.

Current and potential policy avenues for affecting decisions and outcomes along the continuum are shown in the upper part of the figure. Specific policy routes are numbered and keyed to the accompanying legend. Again, arrows are used to indicate the approximate points of policy impact. In addition, shading is used in the upper half of the chart to distinguish different policy types or 'strata', e.g. capacity and mix of physician resources; the provision of information; funding and reimbursement; examination, licensure, certification and regulation; curricula; and spatial location incentives and resources.

Figure 1 is intended to be an overview or backdrop for the more selective analysis of options and recommendations that is presented in the following section. The upper part of the chart in particular may be used in two ways, 'vertically' or 'horizontally'. In the former case, a cluster of policies of different types may be examined for a specific phase of the life-cycle continuum (e.g. all policies affecting Canadian undergraduate medical education). In the latter, policies of a specific type (e.g. funding and reimbursement) may be examined for their points of effect along the entire life-cycle continuum.

Overall, Figure 1 illustrates both the large number of places at which policy changes might be introduced into the physician resources sector and the many different types of change which might be introduced into this complex sub-system. It should be kept in mind that both the upper part and (especially) the lower part of the chart are in fact simplifications of even more subtle or detailed processes. It should also be remembered that the identified policy avenues should <u>not</u> be viewed as isolated options. The pursuit of one route almost always has repercussions on or

Figure 1: A Framework for Physician Resource Policy



*Routes through which change can be enacted, without consideration of control over change.

Barer/Stoddart

Figure 1 Legend

A Canadian citizens & permanent residents
B Withdrawals from training
C MCCQE failures
D Visa trainees
E Non-clinical practice careers
F Visa physicians
G Retirement
H Emigrants

1 Admission criteria
2 Size of entering class
3 Reserved/conditional entry places
4 Conditional bursaries/scholarships
5 Curriculum content
6 Training sites
7 Sources and amount of funding
8 Anticipated community needs, career opportunities, context of practice, etc.
9 Exam MCCQE (LMCC)
10 Immigration policy
11 Recruitment of visa trainees
12 CIMS
13 MCCEE
14 Provincial College special registers
15 Trainee salaries
16 Funding of supervisors
17 Common licensure standards
18 Public 'return in service'
19 Provincial college licensure
20 Incentives/opportunities to encourage specific specialization, or specific locations
21 Royal College training program accreditation
22 Reimbursement of residents
23 Overall specialty residency numbers and mix
24 Location and size of specific residency programs
25 Reserved/conditional residency positions
26 Residency program clinical & contextual exposures
27 Service responsibilities of residents
28 Royal College certification examinations
29 Recruitment of visa physicians
30 Scope of practice legislation
31 Promulgation of practice guidelines
32 Quality assurance/audit
33 Competency assurance
34 Regional distribution policies (eg. hospital privileges or 'billing numbers')
35 Regional manpower plans
36 Adjudication rules for reimbursement by provincial medical plans
37 Patterns of practice review
38 Global medical expenditure budgets
39 Decentralized funding envelopes
40 Continuing education programs
41 Methods of physician remuneration
42 Physician incomes
43 Relative incomes policies
- inter-regional
- inter-specialty
44 Fee levels
45 Expenses of practice compensation
46 Relative fee structure
- inter-specialty
- inter-item
- inter-regional
47 Familial, social, cultural and professional support policies
48 Public education
49 Funding of alternatives to clinical careers

implications for other routes, as emphasized in the background documents. To attempt to portray these inter-dependencies and connections in the same figure would have made the figure unreadable.

One of our colleagues remarked, "Figure 1 may look messy, but that's the way the world is out there". This figure illustrates rather graphically the difficult challenge of policy co-ordination necessary to ensure policy consistency, both 'vertically' and 'horizontally'.

B. Summary of Recommendations and Options

Although we attempt to provide a relatively concise summary of the key recommendations and options, the reader is encouraged to read the background documents to this report in order to gain a sense of the complexities and inter-dependencies that are not always made explicit below.

The ordering of these recommendations is not intended to indicate priorities. Rather it follows (approximately) the medical career life-cycle which has been used as the conceptual framework for our analysis. (Note, however, that the numbering of recommendations below is <u>not</u> intended to correspond to the numbering of policy avenues in Figure 1.)

Undergraduate MD Education

Enrolment

1. Undergraduate enrolment should be adjusted so as to maintain approximately the current population:physician ratio; further reductions in this ratio are not warranted. At present a domestic entry class size of 1600 students is consistent with this objective. This represents a reduction of less than 10% in current domestic entry class size. This recommendation assumes the implementation of concurrent policies (see below) regarding graduates of foreign medical schools, funding of Canadian medical schools, and the supply and mix of post-MD training positions.

Admissions Process

2. The criteria used for admission to medical school should place more emphasis on broadly-based academic preparation and performance, life experiences, and problem-solving and inter-personal skills of applicants.

3. 'Home-province' advantage for applicants should be eliminated or reduced, so that medical schools become a 'national' resource equally available to all Canadian students irrespective of their province of residence.

4. If geographic maldistribution is a high priority problem, some entry class places should be reserved in medical schools for students from under-serviced areas. Alternatively, or perhaps in addition, some places should be reserved for applicants willing to sign (at time of admission) contracts for pre- or post-licensure service provision in designated under-serviced areas.

Curricula

5. The existing undergraduate curriculum should be broadened to include a view of health in its societal context. This will mean greater emphasis on certain clinical areas of increasing importance, exposure to discussions about the context as well as the content of medicine, and more explicit identification of the management or 'gatekeeper' skills required by today's primary care physicians.

6. More training should be located outside of urban tertiary care environments.

Information for Students

7. A national database should be established containing information on characteristics of practice and opportunities for practitioners by, at least, specialty and region. Medical students should also be provided with information on socio-demographic and health profiles of populations, by region, and on emerging developments such as quality assurance and competency assurance activities of hospitals or licensing authorities which will affect the context of their practice.

Graduates of Foreign Medical Schools (GOFMS)

8. An objective should be adopted, and specific policies enacted, to reduce Canadian reliance on GOFMS in the longer term. This should be achieved through policy initiatives in other areas (see recommendations above and below) which will have the effect of encouraging Canadian graduates to fill those necessary positions presently 'staffed' by 'selected' visa physicians and trainees.

9. A more concerted effort should be made to monitor and strictly enforce conditions of entry for visa trainees and visa physicians.

10. More creative policies need to be developed to encourage 'non-selected' GOFMS entering Canada on grounds unrelated to their profession to fill positions presently filled by 'selected' GOFMS. The feasibility of a national strategy on this issue should be investigated further.

11. Progress on implementation of the recommendations contained in the 1986 Report of the Joint Working Group on Graduates of Foreign Medical Schools to the Federal/Provincial Advisory Committee on Health Human Resources should be reviewed and an action plan should be developed for the recommendations which have not received attention to date.

Post-MD Pre-Licensure Training

12. The annual number of funded positions for graduates of Canadian medical schools should approximate the number of Canadian medical school graduates times the length of post-MD pre-licensure training.

13. The types of clinical training settings require significant re-alignment away from tertiary care centres and toward settings which more closely resemble trainees' eventual practice settings.

14. Trainees should receive more exposure to traditionally under-emphasized areas such as chronic care, mental health, rural area practice and others. The shift from a one-year to two-year pre-licensure requirement affords an opportunity to implement this re-orientation.

15. Post-MD pre-licensure training requirements should be consistent across provinces.

16. Further consideration and discussion should be given to the possibility of requiring a period of (non-fee-for-service) remunerated public service (either prior to or upon licensure) in under-serviced geographic and/or clinical areas, particularly if current problems and rigidities in the physician resources sector persist.

Residency Training and Specialty Certification

17. The national capacity for residency training should be determined by the educational needs of graduates of Canadian medical schools, and not by clinical service imperatives or other factors. This implies the need for about a 10% reduction in the overall numbers of post-MD training positions funded by provincial Ministries of Health in Canada (even after all provinces have adopted a standard two-year pre-licensure training requirement, and assuming that recommendation #1 above is adopted; see also companion recommendation #19 below).

18. Specialty training programmes should be examined to ascertain the time and extent of clinical exposure required for training, excluding resident provision of purely service needs.

19. Necessary clinical services currently provided by residents, but which are not essential for their specialty training, should be provided by other configurations of health-care personnel (including possibly non-physician personnel). Several options are suggested in the background documents for examination and further discussion.

20. A forecasting model should be developed nationally which would use detailed data on the characteristics of the existing supply of specialists to project future specialty-specific supply. This is seen as an important input into national discussions of adjustments to the mix of specialty training positions.

21. A national and/or regional co-ordinating body(ies) should be created to oversee and broker the rationalization, redistribution, and ongoing adjustment of the specialty mix and location of residency training positions. Included in the goals of these bodies should be the reduction of unjustified duplication of sub-specialty training programmes and the co-ordination of all sources of residency position funding.

22. Coincident with the restructuring of the funding of academic medical centres (see recommendations below):
    (a) fee-for-service payments to clinical supervisors for services provided under supervision by residents should be eliminated;
    (b) clinical supervisors should receive non-fee payment explicitly for the activity of clinical supervision.

23. If 'under-subscription' by Canadians of particular residency programmes persists <u>after</u> the recommended rationalization of the number, specialty mix and location of positions, then consideration should be given to providing financial incentives (such as residency stipend bonuses and/or practitioner income bonuses upon obtaining certification) to encourage the choice of these less popular specialty programmes.

24. Consideration should be given to the establishment of accredited residency programmes specifically designed to train 'generalist specialists' for non-urban hospital-based practice. Ministries of Health could give impetus to this by making available special programmatic funding for the purposes of developing, implementing, and evaluating pilot programmes.

Specialty Maldistribution

25. GOFMS should continue to be used where needed to meet specialist shortages, but should only be viewed as a short term solution.

26. Aside from inherent differences among specialties in their attractiveness as 'lifestyles', overall problems of specialty maldistribution are largely the by-product of more fundamental problems in the training, certification and remuneration of specialists. Several concurrent actions should be taken as part of a concerted effort to address these problems, including:
    (a) a review by the Royal College of Physicians and Surgeons of Canada of its processes of sub-specialty certification and accreditation to identify scope for moderating the proliferation of new recognized specialties and of new accredited training programmes;
    (b) examination of the internal structure of fee schedules by provincial medical associations to identify and remove perverse incentives encouraging the choice of less-needed specialties (also see recommendations on remuneration below);
    (c) exploration by Ministries of Health of remuneration policies (such as income bonuses) to influence career choice and specialty distribution, if identified problems with these instruments can be overcome.

Role and Funding of Academic Medical Centres

27. The academic medicine establishment should show more leadership in several important areas, including: adapting the training of physicians to changing social needs, monitoring the supply and mix of physicians and the appropriateness of the services they provide, maintaining a balance among different types of research, and contributing to more effective continuing education and competency assurance programmes.

28. The funding of academic medical centres needs to be restructured to link it as explicitly as possible to academic goals and the activities and programmes required for their achievement, and to reduce the growing reliance of the centres on clinical earnings.

29. Although the design of specific models may differ across provinces and centres, the restructuring of funding should incorporate several general principles, including the following:
    (a) funding should flow through a single office of responsibility at each centre;
    (b) funding should not be developed on the basis of 'per student' allotments;
    (c) 'envelopes' should be used to provide funds for particular programmatic objectives and activities;
    (d) fee-for-service payment for clinical activity undertaken for academic purposes should be eliminated; funding for these activities should be provided programmatically, and should include clear identification of funds for clinical supervision of post-MD trainees.

30. Within each province, all Ministries providing funds to academic medical centres should do so through collective, co-operative, and co-ordinated negotiating mechanisms with the centres as a group (where there is more than one). Significant improvements in inter-ministerial co-ordination and co-operation are required in this regard in some provinces.

Geographic Maldistribution

31. The 'framing' of this problem should be modified, so that: (i) the policy objective is not seen as equal geographic distribution of all types of physicians but rather as equitable and reasonable access to necessary clinical services; and (ii) policy options are not viewed narrowly as physician resource options but as options involving increased scope for other health-care personnel.

32. Because 'piecemeal' approaches and/or 'trickle-down' policies of general increases in physician supply are unlikely to be any more effective in the future than they have been in the past, improved geographic distribution of medical services will require a concerted effort (and resource commitment) to create a broadly-based and integrated 'policy package' of reinforcing initiatives which cut across virtually every other policy area discussed in this report. Therefore serious consideration and discussion of the priority status of this issue is required.

33. A 'policy package' might include some combination of the following:
- increasing the availability of non-physician personnel as front-line contacts within regional service networks involving regional physician consultants;
- establishing new training programmes for these non-physician personnel;
- improving science programmes and career counselling in rural area high schools;
- reserving undergraduate medical school places for qualified applicants willing to commit to rural area practice;
- revising admissions criteria for medical school to favour qualified rural applicants;
- enhancing rural area exposure in both undergraduate and post-MD training;
- developing new residency training programmes designed explicitly to prepare specialists to serve as rural regional consultants;
- introducing or increasing financial incentives (both at the training and practice stages) to encourage choices of specialties in short rural supply;
- introducing or increasing financial incentives to encourage the location of practices in non-urban settings;

- providing clinical decision-making support networks and regular sources of relief for rural community physicians through academic medical centres;
- providing 'amenity packages' (e.g. travel funding for continuing education, benefits for spouses/children) as part of recruitment and retention strategies;
- encouraging alternative remuneration methods, e.g. regional capitation for primary care (see also recommendations on remuneration below).

Patterns of Medical Service Utilization

34. Medical colleges and associations and academic medical centres should take leadership roles in the further development and dissemination of clinical practice guidelines, and the ongoing review of their application and effectiveness. There is considerable scope in this area for a national collaborative effort.

35. Academic medical centres in particular should play a larger role than at present in quality assurance activities, including the generation and synthesis of research contributing to the development of practice guidelines, the identification of situations where guidelines are needed, and the provision of training both for the individuals performing quality assessments and for those whose performance is identified as requiring improvement.

36. For areas in which clinical practice guidelines already exist, the extent of inappropriate care which is presently occurring should be ascertained.

Regulation and Licensure

37. Exclusive fields of practice should be eliminated and replaced by a more circumscribed set of exclusive acts and reserved titles in order to address overlapping 'scopes of capability' of physicians and other health-care personnel.

38. The establishment of programmes to assure the public of the continuing competence of all physicians should be given higher priority, under the leadership of provincial licensing authorities. If effective voluntary programmes which assure the continuing competence of all physicians cannot be designed, then mandatory continuing competence assurance programmes should be established.

39. Licensing authorities in each province should ensure that there is inter-regional portability of licenses.

Remuneration

40. Although there is no single 'best' way to pay physicians in all circumstances, too little use is made of alternatives to fee-for-service as a payment method in Canada. Fee-for-service should be replaced wherever that method of payment aligns poorly with the nature or objective of the service being provided. Following this principle, specific candidates for national payment reform might be:
    (a) elimination of fee-based payment associated with academic activity (where the primary objectives are either education or educational supervision) (see recommendation #29 above);
    (b) replacement of fee-for-service with global funding (contracts) for highly specialized, relatively uncommon tertiary or quaternary services serving regional or provincial populations;
    (c) replacement of fee-for-service by capitation payment for primary care (or a mixture of capitation plus limited fee-for-service) to emphasize and reward the management function of primary care physicians.
    (d) sessional payments or salaries instead of fees-for-service (where it still exists) for emergency department physicians.

    These are examples of situations where objectives and methods of payment seem mis-aligned. There are undoubtedly others (see recommendation #41 below).

41. Further review of the appropriateness of method of payment for the nature and objectives of specific types of services should be undertaken for other types of services.

42. Master agreements governing remuneration negotiations between governments and physicians should facilitate the full range of remuneration methods and include a formal dispute resolution mechanism.

43. The development of inter-provincial consistency in fee relativities within fee schedules should be encouraged.

Global Expenditure Policy

44. Some form of global budgetary policy will be a necessary component of a responsible policy package. Both quality of care and public accountability would be best served if all provinces moved toward a system of resource allocation consisting of 'top-down' budgetary allocative processes and 'bottom-up' evaluative and corrective processes.

45. The level of overall resource commitment to health care is ultimately a matter of social choice. Based on today's apparent social consensus about resource commitments and on existing opportunities for improving effectiveness and efficiency in service delivery and utilization, however, a strong case can be made for limiting increases in health-care expenditures (and especially medical care expenditures) to those necessary to account for general inflation, population growth, and changes in the 'needs-composition' of the population.

46. In the absence of reform of fee-for-service remuneration for physicians and of other physician income reforms, carefully developed individual income ceilings should be considered as an alternative to assist with medical care budgetary control.

Information Creation and Provision

47. A nationally co-ordinated information system that could guide the determination of numbers and mix of post-MD training positions should be established with input from stakeholders and organizations which have already developed useful data.

48. Increased emphasis should be placed on 'applied' health services research (i.e. issues such as the effectiveness and efficiency of alternative services or delivery models, and alternative (to medical care) ways of improving population health). To make this investment worthwhile, however, there needs to be a better interaction between research funding agencies (and researchers) and policy-makers.

49. Routine health status/disability surveys, similar to those now in use in Ontario and Québec, should be fielded in a relatively consistent format in all provinces, with pooling of some of the developmental fixed costs and resources. These surveys should be designed to (among other things) support investigations into the broader determinants of health, monitor key changes in health needs, and provide information on the relationship between health deficits and the use of different types of health-care resources.

50. The public should receive more information than at present on issues such as clinical effectiveness and cost-effectiveness of services, current resource allocations, and determinants of health.

51. It is important to realize that no amount of information is ever likely to be sufficient to satisfy all parties in any policy development process. Furthermore, information itself cannot and does not 'make' fundamental allocative and distributive decisions. Therefore, although there are deficiencies in the

amount and quality of current information, these should not be allowed to paralyze policy development in the physician resources sector. Failure to act on the serious problems in this sector will itself be a policy statement.

Next Steps

52. A process should be launched to seek the reactions of stakeholders, including government officials, from across the country to the framework, analysis, options and recommendations of this report. For this purpose, the report should be viewed as a discussion document which (a) adds impetus to selected changes that are just beginning to occur; (b) encourages other changes that are not yet apparent; and (c) demonstrates the need for integrated policy development within the physician resources sector.

53. The objectives of this process might include the following:
    (a) to confirm the assessment rendered herein, that it is both imperative and possible to begin now a careful process of significant change in this sector;
    (b) to seek and develop agreement on the principles upon which collaboration will occur among parties in implementing and managing change;
    (c) to identify the 'policy packages' for which there is the strongest support;
    (d) to explore the willingness of different parties to take leading or supportive roles in key areas;
    (e) to identify further the practical obstacles to specific policy changes, and to develop strategies and agreements to address and overcome them; and
    (f) to address issues of the timing and co-ordination of specific initiatives more explicitly.

Appendix

List of Individuals and Organizations Interviewed or Consulted

Individuals and Organizations Interviewed or Consulted

(All affiliations are as of time of interview)

Mr. Orvill Adams
Curry, Adams & Associates
Ottawa

Dr. N.R. Anthonisen
Dean, Faculty of Medicine
The University of Manitoba

Dr. Martin Barkin
Deputy Minister, Ministry of Health
Province of Ontario

Dr. Harvey Barkun
Executive Director
Association of Canadian Medical Colleges

Dr. Robert Bartlett
New Brunswick Medical Association

Dr. Lorne Bellan
Previous Past-President
Canadian Association of Interns and Residents

Dr. Stephen Birch
Associate Co-ordinator
Centre for Health Economics and Policy Analysis
McMaster University

Dr. R.A. Bowen
Chairman
Physician Supply Committee
B.C. Medical Association

Mrs. Verna Bruce
Deputy Minister
Department of Health and Social Services
Province of Prince Edward Island

Dr. Frank Bugeja
Past-President
Professional Association of Residents and Internes of B.C.

Mr. Guy Bujold
Director
Health Policy Division
Policy Development Directorate
Policy, Planning & Information Branch
Health and Welfare Canada

Dr. Michel Bureau
President
Québec Association of the Deans
of the Medical Schools

Ms. Barbara Burke,
Vice-President, Nursing
St. Paul's Hospital

Mr. Rick Callaghan
Department of Health and Social Services
Prince Edward Island

Mr. Rick Cameron
Director
Policy & Strategic Planning Systems
Research and Planning Division
Department of Health and Fitness
Nova Scotia

Mr. Y.M. Cheung
Director
Health Economics and Statistics Branch
Alberta Health

Dr. Ruth Collins-Nakai
Professor
Division of Paediatric Cardiology
Department of Paediatrics
University of Alberta

Dr. A. Douglas Courtemanche
Associate Dean, Residency Training
Faculty of Medicine
University of British Columbia

Mr. Bob Cowcill
Deputy Minister of Health
Northwest Territories

Dr. Douglas Cudmore,
Medical Consultant
Hospital and Health Services Commission
Prince Edward Island

Dr. Paul Dagg
President
Professional Association of Interns and Residents of Ontario

Dr. Marshall Dahl
President
Professional Association of Residents and Internes of B.C.

Dr. Pierre-Paul Demers
Director
Office of Fellowship Affairs
Royal College of Physicians and Surgeons of Canada

Dr. Paul Desjardins
President
Québec Federation of Specialist Physicians

Dr. John H. Dirks
Dean, Faculty of Medicine
University of Toronto

Ms. Martine Durier-Copp
Acting Executive Director
Provincial Health Council
Department of Health and Fitness
Nova Scotia

Federal/Provincial/Territorial Advisory Committee
on Health Human Resources

Mr. Jean Guy Finn
Deputy Minister
Department of Health & Community Services
Province of New Brunswick

Mr. Jim Flett
President
Vancouver General Hospital

Ms. Marie Fortier
Director General
Health Services Directorate
Health Services and Promotion Branch

Dr. Hedy Fry
President
British Columbia Medical Association

Mr. Jon Gale
Human Resource Management Consultant
President, HR Solutions Ltd.

Mr. Peter Glynn
Assistant Deputy Minister
Health Services & Promotion Branch
National Health & Welfare

Mr. Wayne J. Grady
Deputy Minister
Department of Health & Fitness
Province of Nova Scotia

Ms. Gay Hanson
Assistant Deputy Minister, Health Services
Department of Health and Human Resources
Government of Yukon

Dr. Kit Henderson
Chairman
Medical Services Commission
B.C. Ministry of Health

Dr. Martin Hollenberg
Dean, Faculty of Medicine
University of British Columbia

Dr. Gilles Hurteau
Executive Director
Royal College of Physicians and Surgeons of Canada

Dr. Juan Roberto Iglesias
Associate Deputy Minister (Health)
Québec

Ms. Brenda Johnson
Manager, Health Disciplines Planning
Research and Planning Branch
Alberta Health

Mr. D.J. Junk
Assistant Deputy Minister
Policy and Planning Services Division
Alberta Health

Dr. Karyn Kaufman
Implementation Coordinator - Midwifery
Women's Health Bureau
Ministry of Health, Ontario

Mr. Wayne Keddy
President
University Hospital
Vancouver, B.C.

Mr. D. Kelly
Assistant Deputy Minister
Health Care Insurance Division
Alberta Health

Dr. D.A. Kendel
Registrar
College of Physicians and Surgeons of Saskatchewan

Dr. David Kinloch
Assistant Deputy Minister
Insurance/Institutional Health
Northwest Territories

Prof. Roberta Labelle
Centre for Health Economics and Policy Analysis, and
Department of Clinical Epidemiology and Biostatistics
McMaster University

Mr. Hugh Ladner, Q.C.
Consultant
Vancouver, B.C.

Mr. Paul Lamarche
Associate Deputy Minister (Planning and Evaluation)
Québec

Dr. Léo-Paul Landry
Secretary General
Canadian Medical Association

Dr. André Lapierre
Secretary General
Québec College of Physicians

Dr. Roland Lauener
Associate Dean, Undergraduate Programs
Faculty of Medicine
University of British Columbia

Dr. Adam Linton
Ontario Medical Association

Mr. Chris Lovelace
Assistant Deputy Minister, Institutional Services
B.C. Ministry of Health

Dr. M. David Low
President
University of Texas Health Sciences Center

Dr. Jim Low
Office of Fellowship Affiars
Royal College of Physicians and Surgeons of Canada

Dr. William B. MacDonald
Deputy Minister of Health
Province of Saskatchewan

Dr. S.M. MacLeod
Dean, Faculty of Health Sciences
McMaster University

Dr. David Marr
New Brunswick Medical Association

Dr. Robert Maudsley
Vice-Dean, Faculty of Medicine
Queen's University

Mr. Peter Maurer
Co-ordinator
Lakehead-McMaster Link
Lakehead University

Mr. Frank Maynard
Deputy Minister, Department of Health
Province of Manitoba

Mr. E. Neil McKelvey
Stewart, McKelvey, Sterling, Scales
Barristers and Solicitors
St. John, New Brunswick

Dr. Lionel E. McLeod
Vice-President, Medical Services
University Hospital
Vancouver, B.C.

Ms. Lenore Mills
Executive Director
Ontario Council of Teaching Hospitals

Mr. Rory Molnar
Senior Economist
Manitoba Medical Association

Dr. Carl Moore
Chairman, Manpower Committee
College of Family Physicians of Canada

Mr. Ron Mulchey
President & CEO
St. Paul's Hospital
Vancouver, B.C.

Dr. David Mulder
Task Force on Manpower
Royal College of Physicians and Surgeons of Canada

Dr. T.J. Murray
Dean, Faculty of Medicine
Dalhousie University

Dr. Christine Newman
Past-President
Canadian Association of Interns and Residents

Dr. Reginald L. Perkin
Executive Director
College of Family Physicians of Canada

Dr. Richard H.M. Plain
Professor
Department of Economics
University of Alberta

Mr. Walter Podiluk
Deputy Chairman and Executive Director
Saskatchewan Commission on Directions in Health Care

Dr. Dennis Psutka
Department of Family Medicine
McMaster University

Dr. Michael Rachlis
Epidemiology and Program Evaluation Consultant
Toronto, Ontario

Dr. Clément Richer
President
Québec Federation of General Practitioners

Mr. Norbert Rodrigue
Director
Association of Regional Councils of Health and Social Services
Québec

Ms. Eva Ryten
Director
Office of Research and Information Services
Association of Canadian Medical Colleges

Dr. David Sackett
Professor
Department of Clinical Epidemiology and Biostatistics
McMaster University

Mr. Graham Scott
McMillan, Binch
Toronto, Ontario

Dr. Hugh Scully
Canadian Medical Association

Dr. Anthony Shardt
Associate Registrar
Research and Policy Development
College of Physicians and Surgeons of Ontario

Dr. D.G. Sinclair
Dean, Faculty of Medicine
Queen's University

Mr. J. Sproule
Executive Assistant to the Deputy Minister
Alberta Health

Mr. Donald Stein
Director of Administration
College of Family Physicians of Canada

Ms. Krysia Strawczynski
Deputy Minister
B.C. Ministry of Health

Mr. Terry Sullivan
Acting Executive Director
Premier's Council on Health Strategy
Toronto, Ontario

Mr. Bill Tholl
Canadian Medical Association

Mr. Darrell Thomson
Director of Economics
British Columbia Medical Association

Dr. M. Watanabe
Dean, Faculty of Medicine
The University of Calgary

Dr. William A. Webber,
Associate Vice-President, Academic
University of British Columbia

Dr. Ian White
Chairman, Physician Resource Committee
Manitoba Medical Association

Dr. Robert J. Williams
Deputy Minister
Department of Health
Government of Newfoundland & Labrador

Dr. D.R. Wilson
Dean, Faculty of Medicine
The University of Alberta

Dr. Brent Winston
President
Canadian Association of Interns and Residents

Mr. Jim Wolstenholme
Applied Management Consultants
Fredericton, N.B.